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IN THE

Supreme Court of the United States

OCTOBER TERM, 1951.

No. 703

STUART LABORATORIES, INC. and
WILLIAM B. HUGLE,

Petitioners,

vs.

UNION CARBIDE AND CARBON CORPORATION,

Respondent.

PETITION FOR A WRIT OF CERTIORARI TO THE UNITED STATES COURT OF APPEALS FOR THE THIRD CIRCUIT.

BRIEF FOR RESPONDENT IN OPPOSITION

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The Scheffer Press, Inc.—ANdover 3-6850

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OPINIONS BELOW

The opinion of the United States District Court for the District of New Jersey is reported at 97 F. Supp. 713. The opinion of the Court of Appeals for the Third Circuit is reported in 194 F. (2d) 823.[1]

JURISDICTION

Petitioners have invoked the jurisdiction of this Court under Sections 1254 and 2101 of the Judicial Code.

[1] These Opinions and the Findings of Fact are reproduced in a printed book "Court Decisions" submitted herewith for the convenience of the Court in making reference thereto.

QUESTIONS PRESENTED ARE NOT WARRANTED BY THE FACTS

Since the questions proffered in the petition are premised upon assumptions diametrically opposed to the facts as found by the District Court, and unanimously concurred in by the Court of Appeals, the questions do not present any issues of law which may properly be considered here.

PETITIONERS' STATEMENT

Petitioners' Statement of Facts presents the case as though this were the Trial Court. The statement argues the facts, ignores the concurrent Findings of the Courts below, and is based on what the petitioners failed to prove in the District Court. It is such unfounded assertions which bottom the questions presented to this Court.

STATUTES INVOLVED

The statutes followed by the District Court and Appellate Court are the following:

> 35 U.S.C. 33; R.S. 4888, as amended. "Application for patent; description; specification and claim
>
> "Before any inventor or discoverer shall receive a patent for his invention or discovery he shall make application therefor, in writing, to the Commissioner of Patents, and shall file in the Patent Office a written description of the same, and of the manner and process of making, constructing, compounding, and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art or science to which it appertains, or with which it is most nearly connected, to make, construct, compound, and use the same; and in case of a machine, he shall explain the principle thereof, and the best mode in which he has contemplated applying that principle, so as to distinguish it from other inventions; and he shall particularly point out and distinctly claim the part, improvement, or combination which he claims

as his invention or discovery. The specification and claim shall be signed by the inventor. No plant patent shall be declared invalid on the ground of noncompliance with this section if the description is made as complete as is reasonably possible."

35 U.S.C. 69; R.S. 4920, as amended. "Pleading and proof in actions for infringement

"In any action for infringement the defendant may plead the general issue, and, having given notice in writing to the plaintiff or his attorney thirty days before, may prove on trial any one or more of the following special matters:

"First. That for the purpose of deceiving the public the description and specification filed by the patentee in the Patent Office was made to contain less than the whole truth relative to his invention or discovery, or more than is necessary to produce the desired effect; * * *."

STATEMENT OF THE CASE

This a patent suit based upon Burdick and Glenn patent No. 2,488,507, entitled "Synthetic Star Rubies and Star Sapphires and Process for Producing Same". The patent has been held valid and infringed by concurring findings of the District Court and Court of Appeals.

The original plaintiff in this suit was The Linde Air Products Company, assignee of the Burdick and Glenn patent (Finding of Fact No. 1, Ct. Dec. 7).[1] Following a merger of the plaintiff company with respondent Union Carbide and Carbon Corporation, the latter was substituted as party plaintiff by consent order (Ct. of Appeals, Footnote 1, Ct. Dec. 13). Respondent has two plants, at Chicago, Illinois and East Chicago, Indiana, respectively, devoted to the manufacture of synthetic ruby and sapphire, including synthetic star rubies and star sapphires (R. 187).

[1] Abbreviations and citations:
R. Original typewritten transcript of proceedings at trial.
Ct. Dec. Printed book of "Court Decisions" submitted herewith.

Petitioner Stuart Laboratories, Inc., of which petitioner, William B. Hugle, is vice-president, director, and operating manager, has its principal place of business in Fairlawn, New Jersey.

The relationship of these parties is set forth succinctly in the opinion of the Court of Appeals as follows:

> "Defendant Hugle was employed by plaintiff as plant chemist at its South Chicago plant at about the time several steps in the patented process were being carried out on a commercial scale. Hugle left plaintiff's employ in 1948 and was instrumental in organizing defendant Stuart Laboratories. Since its formation in 1949, Stuart's sole activity has been the production of star rubies and sapphires." (Footnote 2, Ct. Dec. 13; see Finding of Fact No. 16, Ct. Dec. 10).

Out of this former employment of Hugle arose the relationship of trust and confidence on which a second cause of action in this case is based. This cause of action was ordered separated (and is subject to respondent's right to present rebuttal evidence) pursuant to the provisions of Rule 42(b), F.R.C.P., pending decision on the patent issues. Also separated is the petitioners' counterclaim (R. 1274-1277).

Synthetic Star Rubies and Star Sapphires

Rubies and sapphires are composed primarily of aluminum oxide, known as alumina or corundum. They differ from each other only in small percentages of compounds which supply the color (Finding of Fact No. 23, Ct. Dec. 11). Natural rubies and sapphires have been used for many years as gemstones of value. Even more valuable are the rare natural star rubies and star sapphires which sell for as much as $1,000 per carat (Finding of Fact No. 4, Ct. Dec. 8).

Unstarred synthetic rubies and sapphires have been produced commercially from powdered alumina for over thirty years by the Verneuil process.[3] (Finding of Fact No. 4, Ct. Dec. 8). Their uses include many industrial appplications such as watch bearings, abrasion-resistant drawing dies, parts of electrical apparatus, as well as use as ornamental gems. Respondent became interested in the production of synthetic rubies and sapphires during the last war for use in defense production. Prior to that time, most synthetic rubies and sapphires were imported from Europe (Dist. Ct., Ct. Dec. 2).

Following a cutback in demand for synthetic ruby and sapphire after the last war, respondent cast about for new corundum products and cheaper ways of making ruby and sapphire to keep its defense production facilities in use. While engaged in finding simplified methods of coloring sapphire, the patentees Burdick and Glenn, employees of respondent, stumbled onto the discovery of synthesizing star rubies and star sapphires. In the more than 30 years of Verneuil history no one prior to the patentees had succeeded in unlocking the secret of synthesizing *star* rubies and *star* sapphires. This long period ensued in spite of the fact that the natural stones were highly prized and their synthesis the subject of intensive research (Findings of Fact Nos. 3, 4 and 6, Ct. Dec. 8; Ct. of Appeals, Ct. Dec. 14-15).

Petitioners depreciate the patentees' discovery, saying merely that "Salable star rubies and star sapphires were apparently novel at the time the patent was applied for" (Petition, p. 4). However, the District Court found that:

> "The patentees were the first people in this art successfully to synthesize star rubies and star sapphires." (Finding of Fact No. 3, Ct. Dec. 8).

[3] A brief description of the Verneuil process is found in the Opinion of the Court of Appeals (Ct. Dec. 14-15).

Indeed, the Trial Judge was so impressed with the achievement of Burdick and Glenn that he said at the trial:

> "I have been sitting in these cases a good many years and I have never seen anything in my life that comes so near to being a real, genuine invention, * * *" (R. 1713).

The published literature recognized the discovery as "startling" and even petitioners' counsel was moved to remark:

> "Mr. Grant: We don't contest that the achievement is sensational; I think it probably is." (R. 1713).

Summing up the record before it, the Court of Appeals said in its Opinion:

> "This invention, we feel, is a significant stride forward." (Ct. Dec. 17).

The Patent in Suit

The patentees, having uncovered the secret of making synthetic star rubies and star sapphires, "proceeded to verify the process and ascertain its critical limits" (Finding of Fact No. 6, Ct. Dec. 8). On August 27, 1947, they filed an application for patent on the star rubies and star sapphires (Finding of Fact No. 9, Ct. Dec. 9). Two claims selected by the Courts below as typical are set forth in the footnote.[4]

---

[4] "5. A process for developing asterism in massive nongranular single crystals of ruby and sapphire grown synthetically by Verneuil's procedure from an alumina powder containing as an essential ingredient 0.1% to 0.3% of TiO_2, said process comprising heating such a crystal at a temperature within the range between 1100° C. and 1500° C., and maintaining said crystal at a temperature within said range until titanium oxide precipitates out of solution." (Claim 5 of pat. in suit).

"19. A crystal resembling both in appearance and asterism, a natural star sapphire or ruby but composed of a synthesized mass of corundum and pigmenting material with included needle-like crystallites of a precipitated titanium compound oriented therein, the synthetic character of the crystal being detectable by curved growth lines which appear internally thereof as contrasted with the straight form of any growth lines which appear in the natural mineral crystals." (Claim 19 of pat. in suit).

Petitioners vigorously attacked in the proceedings below the sufficiency of the disclosure of the Burdick et al. patent. That it does in fact describe a process for successfully making synthetic star stones is the subject of a specific Finding of Fact by the Trial Court:

> "13. The description of the process in the patent in suit can be used successfully by a person skilled in the Verneuil art of boule growing to produce synthetic star rubies and sapphires of gem quality. No higher percentage of failures will be encountered in its use than is customarily encountered in making highly pigmented unstarred stones." (Finding of Fact No. 13, Ct. Dec. 9).
>
> "• • • the teachings of the patent are sufficient • • • to produce asterism • • • a profitable percentage of the product will be of gem quality." (Dist. Ct., Ct. Dec. 4-5).

Upon consideration of the operability of the disclosed method, the Court of Appeals concurred, saying:

> "• • • The finding that the description of the process in the patent is sufficient to enable a person skilled in the art to grow star rubies and sapphires successfully is supported by adequate evidence and should be sustained." (Ct. Dec. 20-21).

Included in the attack by petitioners on adequacy of the disclosure were two techniques known as "annealing" and "orientation control" (Dist. Ct., Ct. Dec. 5; Ct. of Appeals, Ct. Dec. 18). Annealing involves raising the ruby and sapphire crystals made by the Verneuil process to a high temperature to relieve internal strains and remove a tendency of the crystal to split, much as iron and steel are annealed (Dist. Ct., Ct. Dec. 5; Ct. of Appeals, Ct. Dec. 18). Orientation control refers to growing ruby or sapphire crystal in such a way as to control the direction of the optical properties of the

crystal in relation to the direction of growth (Finding of Fact No. 25, Ct. Dec. 12; Ct. of Appeals, Ct. Dec. 18). Both are old in the art (R. 77, 1009-10, Pltf. Exh. 71, Deft. Exh. 109).

In support of their arguments, petitioners relied largely on geometric models and theoretical testimony. These were expressly found inapt by the Trial Court because they are premised on false presumption rather than fact (Dist. Ct., Ct. Dec. 5).

In addition these two procedures were found unnecessary by both Courts below to the profitable production of synthetic star rubies and star sapphires, if the disclosure in the patent is followed (Finding of Fact No. 13, Ct. Dec. 9; Ct. of Appeals, Ct. Dec. 20). As stated by the District Court:

> "The conclusion, therefore, is reached * * * that the teachings of the patent are sufficient * * * to produce asterism in these gems * * * and that a profitable percentage of the product will be of gem quality." (Ct. Dec. 4).

Alternatively, petitioners argued below the subjective point that, nevertheless, annealing and 90° orientation were known by the patentees to be highly important steps commercially and were deliberately omitted from the patent. Both lower Courts found to the contrary (Finding of Fact No. 14, Ct. Dec. 10; Ct. of Appeals, Ct. Dec. 21).

Annealing and orientation control were old in the art of boule-growing (R. 77, 118-9, 956-7, 1009, 1389; Pltf. Exh. 71, Deft. Exh. 109). The inventors did consider their applicability to the patented process. Testimony and exhibits presented by respondent show that 90° orientation control was of "very questionable importance, very questionable" (R. 115), and that annealing was not known to be worthwhile at the time the application was filed (R. 1503, 1504; Ct. of Appeals, Ct. Dec. 21).

Consequently the Trial Court found on this issue as follows:

> "14. The inventors disclosed all of what they believed to be the essentials of their process. There was no fraudulent withholding of information." (Finding of Fact No. 14, Ct. Dec. 10);

and specifically as to annealing:

> "15. Annealing [illegible] boules (heating to a temperature which is short of fusion to relieve strains) is not essential to the production of gem quality star stones. It is used by the plaintiff in its commercial production and no doubt contributes to lowering the cost of production. But it is not essential and, indeed, at the time of applying for patent was not determined to be a preferable procedure. * * *" (Finding of Fact No. 15, Ct. Dec. 10).

The Court of Appeals reviewing the record of the case on this point found:

> "While there is evidence that annealing and 90° orientation were considered desirable, inventor Burdick testified that at the time of the patent application, the wisdom of both annealing and 90° orientation was seriously questioned.
>
> "On the basis of this evidence, the trial court made a specific finding that at the time of the patent application, it was not determined that annealing was a preferable procedure.
>
> "It also found generally that there was no fraudulent withholding of information. This finding, we believe, was made in the light of R.S. § 4920 and thus constitutes a finding that the patentees disclosed 'the whole truth relative to [their] invention.'" (Ct. Dec. 21-22).

Infringement

Petitioner Hugle learned the chemical formulae for the powder used in making synthetic star rubies and star sapphires from instructions given him as plant chemist at respondent's South Chicago plant (R. 208-209, 251). The heat-treating step was carried out in the same laboratory room in which he worked (pp. 267-268, 324). Some ten months before the patent issued and the process made public, he was instrumental in setting up petitioner Stuart Laboratories solely for the purpose of making synthetic star rubies and star sapphires.

Not contested here or below is the fact that petitioners' synthetic star rubies and star sapphires are the same stones defined by the article claims of the patent in suit. Petitioners' attack here, as it was in both Courts below, is upon the infringement of the process claims of the patent.

Petitioners' process is set forth in the Findings of Fact of the District Court as follows:

> "20. In producing their star stones, defendants grow boules by the Verneuil process. In the powder used for growing such boules they employ from 0.1% to 0.3% titania." (Finding of Fact No. 20, Ct. Dec. 11).
>
> "21. Defendants subject the completed boules to a temperature of between 1500° C. and 1100° C. for a period of several hours, sufficient to precipitate the titania in the boule. * * *" (Finding of Fact No. 21, Ct. Dec. 11).

These findings apparently are not questioned.

The District Court held the claims to be infringed (Findings of Fact Nos. 19 and 22, Ct. Dec. 11).

Concurring in the holding of infringement, the Court of Appeals stated:

> "Finally, defendants contend that they have not infringed the patented process because they reheat their boules only incidentally as a part of an annealing cycle. • • • We believe there is sufficient evidence to support the trial court's finding of infringement. The law is clear that an addition to a patented process does not avert infringement, even where the addition is an improvement. 3 Walker on Patents p. 1737 (Deller's ed. 1937). Defendants infringed the patented process when they used the critical amounts of titania and operated within the temperature range of 1500° to 1100° C. long enough to precipitate the titania." (Ct. Dec. 23-24).

ARGUMENT.

Summary of Argument.

This is the usual patent case involving the issues of validity and infringement. It is unusual in only one aspect—all agree it involves patentable invention. Of the discovery of synthetic star rubies and star sapphires, the Court of Appeals said "a significant stride forward"; the District Court stated that it was "a real genuine invention"; experts in the gem trade termed it "startling"; petitioners' counsel after trial agreed that it was "a sensational achievement" (Ct. Dec. 17, R. 1713, Deft. Exh. 18, p. 452).

This is also a case in which the construction of the patent language is not in dispute in this Court. There is no dispute but that the teachings of the patent must be followed in order to make synthetic star rubies and star sapphires. Petitioners do contend, however, that still further steps must be employed for successful use. The Courts below found to the contrary.

In the following argument for respondent:

Point I will show that the questions presented by petitioners depend for their very existence on assumptions contrary to the Findings of Fact.

Point II will point out that what petitioners really seek is a trial *de novo* on the issues of adequacy of disclosure and infringement.

Point III will show that there is no conflict of decisions and that the Courts below applied the correct law.

Point IV will point out that no important question of federal law is involved.

I.

THE QUESTIONS PRESENTED BY PETITIONERS ARE PREMISED ON ASSUMPTIONS DIRECTLY CONTRARY TO THE CONCURRENT FINDINGS OF THE COURTS BELOW.

CONSEQUENTLY THERE ARE NO QUESTIONS BEFORE THIS COURT WHICH WARRANT THE GRANTING OF THE PETITION.

The Court is being asked to consider questions which are hypothetical, questions which are based upon assumptions contrary to the Findings of Fact found by the District Court and concurred in by the Appellate Court. This Court has many times held that it will not consider questions which are theoretical or do not arise on the record (*Tyrrell* v. *District of Columbia*, 243 U. S. 1 (1917), *Allen-Bradley Local* v. *Wisconsin Employment Relations Board et al.*, 315 U. S. 740, 746 (1942).

For example, in their first question petitioners assert as fact that the applicants for patent had "deliberately omitted" a procedure "which admittedly will 'tremendously increase the yield' of the product and improve the quality". It is these "facts" they say which raise a question justifying the Court's attention. That such "facts" are merely erroneous inferences, expressly repudiated by the Courts below, will be readily seen from the record.

As to the alleged deliberate omission, the District Court held specifically that there had been no such deliberate omission. On the contrary, the District Court found:

> "The inventors disclosed all of what they believed to be the essentials of their process. There was no

fraudulent withholding of information." (Finding of Fact No. 14, Ct. Dec. 10).

With regard to the annealing which petitioners state is so essential, the fact of the matter, as found by the District Court, is:

> "But it [annealing] is not essential and, indeed, at the time of applying for patent was not determined to be a preferable procedure." (Finding of Fact No. 15, Ct. Dec. 10).

As to the process in general, the District Court found:

> "The description of the process in the patent in suit can be used successfully • • • to produce synthetic star rubies and sapphires of gem quality." (Finding of Fact No. 13, Ct. Dec. 9).

That is to say, the description of the process in the patent is sufficient for one skilled in the art to make salable star stones. The District Court went even further than this, stating in its Opinion:

> "The conclusion, therefore, is reached • • • that the teachings of the patent are sufficient • • • to produce asterism • • • and that a profitable percentage of the product will be of gem quality." (Ct. Dec. 4).

It is not without significance that the same "facts", on which petitioners base their first question, were presented to the District Court in almost identical wording, in the form of proposed findings which were considered by the Court and rejected (R. 1791, 1792).

Aside from loading the questions with facts rejected by the District Court, the petitioners have taken the further liberty in question No. 1 of making a direct quotation from one of the witnesses, but with the context altered. The witness did not refer to "yield of the product" but to "yield of stones per boule", which is something quite

different (R. 113), since it does not take into account size and other factors. The only significant factor is the yield per dollar of cost. Since the annealing procedure, which is alleged to have been "deliberately omitted", is an extremely expensive one[5], it is not surprising that petitioners have phrased their question in terms of a side issue.

Most important of all, petitioners have neglected to point out that the quoted statement was not made with reference to the time that the application was filed, but to a time more than three years later. The fact is that at the time of applying for a patent, as specifically found by the District Court, annealing "was not determined to be a preferable procedure" (Finding of Fact No. 15, Ct. Dec. 10).

The second question of petitioners is similarly baseless. This question is premised on an alleged concession; petitioners state flatly:

> "When applicants for a patent * * * concede that they have deliberately omitted from their disclosure * * * a procedure which they admit must be used commercially * * * and must use in order to make money, is the disclosure sufficient?"

The applicants have not conceded or admitted anything of the sort.

Upon what, then, is such an assertion based? If it is assumed that petitioners did not intend deliberately to mislead the Court, then the only possible basis for such a statement is to be found in inferences drawn from fragmentary quotations taken out of context and misapplied in both time and substance. Inference cannot be substi-

[5] Mrs. Hugle testified that annealing was an expensive step, costing seven hundred dollars for a single run for gas alone (R. 1301).

tuted for fact. The things petitioners say are "conceded" and "admitted" are directly contrary to the Findings of Fact.

With regard to the "deliberate omission", the Court found that "The inventors disclosed all * * * There was no fraudulent withholding" (Finding of Fact No. 14, Ct. Dec. 10). Much less was there any deliberate omission of procedure which "must be used commercially" or which must be used "in order to make money". On this the District Court held:

> "The description of the process in the patent in suit can be used successfully * * * to produce synthetic star rubies and sapphires of gem quality * * *" (Finding of Fact No. 13, Ct. Dec. 9).

The District Court further held:

> "* * * the teachings of the patent are sufficient * * * a profitable percentage of the product will be of gem quality." (Ct. Dec. 5).

As to the allegations in the second question regarding trade secrecy, it has been previously mentioned herein that the trade secrecy counts are in nowise inconsistent with the bringing of the action for patent infringement being based upon the fact that the petitioner Hugle up to the time of the infringing activity and before the issuance of the patent was employed by respondent as plant chemist (Finding of Fact No. 16, Ct. Dec. 10) and was thereby able to practice the teaching of the patent before it was published. *Schreyer et al.* v. *Casco Products Corp., et al.*, 190 F. (2d) 921 (C. A. 2nd 1951).

Since the second question presented by petitioners depends for its very existence on factual assumptions contrary to the Findings of Fact of the District Court, it is not one which this Court is called upon to answer.

The third question presented to this Court by petitioners is dependent on its face upon the first and second questions and is equally ill founded. The question is additionally defective because it assumes the existence of trade secrets "essential to commercial operations". The fact of the matter is that there has been no omission of an element essential to commercial operations. The Trial Court specifically held that the inventors "disclosed all" (Finding of Fact No. 14, Ct. Dec. 10), that "the description of the process in the patent can be used successfully" (Finding of Fact No. 13, Ct. Dec. 9), and that using the teachings of the patent "a profitable percentage of the product will be of gem quality" (Ct. Dec. 5). As stated by the Appellate Court, "• • • the patentees disclosed 'the whole truth relative to their invention'" (Ct. Dec. 22). How, then, can the enforceability of the patent be seriously questioned?

The last question presented by petitioners relates to infringement. Again the petitioners have premised the question on assertions not founded on fact. First of all, it is noted that petitioners state in substance that all they do is use an admittedly old procedure. This is assuredly not all they do. They use precisely the proportion of titania and alumina specified in the patent, namely, 0.1 to 0.3% (Finding of Fact No. 20, Ct. Dec. 11) together with treatment by heat within the range described by the patent in order to obtain a product that had never been produced prior to the present invention: synthetic star stones. (Findings of Fact No. 18, 21, Ct. Dec. 10, 11).

Having used the teachings of the patent to produce this admittedly new product, petitioners have the temerity to deny infringement.

Petitioners' present argument that the infringing composition is "recommended but not specified as critical in the disclosure" is a mere play on words. The narrow percentage range of titania is set forth in the patent specification definitely and positively: "For best results the alumina powder * * * should contain at least 0.1% and not more than 0.3% of TiO_2" (Patent in suit, col. 2, l. 50). Is this not specific? And claim 5, for example, refers to titania in this narrow range as an "essential ingredient" (Patent in suit, col. 4, l. 21).

When the question is "unloaded" of its erroneous assumptions, it will be seen that no question at all remains except the one question of fact, namely, "Is infringement present?" The District Court held that it was, and made specific findings on the point. The Appellate Court confirmed that it was.

Perhaps petitioners intend to use the issue of infringement as an indirect attack on patentability and invention. However, the presence of patentable invention is too well established to admit of any question (Findings of Fact Nos. 3, 4, 6 and 10) and is adequately covered elsewhere in this brief.

In whatever aspect considered, the fourth question depends for its existence on factual assumptions contrary to the Findings of Fact of the District Court and cannot properly be considered.

II.

PETITIONERS SEEK A TRIAL DE NOVO IN THIS COURT ON THE ISSUES OF ADEQUACY OF DISCLOSURE AND INFRINGEMENT.

THESE ISSUES ARE THE SUBJECT OF DISPOSITIVE FINDINGS BY THE COURTS BELOW.

The questions presented by petitioners (Pet., p. 2) are premised on assertions and contentions of fact contained only in the Petition itself. The petitioners make no reference in their Statement to any of the Findings of Fact made by the Courts below and make only one reference to the Findings (No. 28) in their entire petition. They treat the case an an action *de novo* in this Court on the issues of disclosure and infringement. The only indication in the Statement that there was a trial below is the reference to the Court of Appeals' opinion affirming the holding of infringement (Pet., p. 4).

In summarizing their assertions of what the evidence shows, petitioners state:

> "There are plainly vital omissions from respondent's patent, essential to commercial success, even if it be assumed (contrary to our contention) that the process will barely succeed in producing stones with a star in them. * * * These two techniques [annealing and 90° orientation] are, in fact, the gist of respondent's discovery." (Pet., p. 9).

This contention in slightly reworded form appears on page 4 of the Petition, where it is questioned:

> "* * * how a novel product could be produced by the application of the old process to an old composition of matter. The answer, we contend, lies in a com-

pletely insufficient disclosure with relation to the process".

These contentions were considered by both Courts below. They were resolved by concurrent Findings of both Courts contrary to petitioners' position. Specific Findings of Fact concluded the dispute below (Findings of Fact Nos. 13, 14 and 15, Ct. Dec. 9, 10). For this Court, the question is whether or not the concurrent Findings of the Courts below are clearly erroneous. *Graver Mfg. Co.* v. *Linde Air Products Co.*, 336 U. S. 271, 275. (Rule 52(a), F. R. C. P.).

The Courts below were not misled as to the teachings of the patent and the scope of the claimed process. They rejected the contention that the "gist" of the invention was in annealing and 90° orientation. Quite to the contrary the Court of Appeals said:

> "* * * we think it took invention of a high order to discover the critical amounts of titania to be used, to determine that reheating would result in the precipitation of titania, and to ascertain the critical limits in time and temperature for the reheating." (Ct. of Appeals, Ct. Dec. 16).

Each of these elements of the invention as viewed by the Court of Appeals is taught in the patent, and is claimed.

The District Court made a specific Finding as to the substance of the invention as covered in the patent specification and claims for producing synthetic star stones (Finding of Fact No. 11, Ct. Dec. 9). Patentability was predicated on this Finding—not on the use of annealing and 90° orientation (Dist. Ct., Ct. Dec. 3).

The novelty or "gist" of the invention is not, as petitioners contend, in extrinsic procedures, but in the disclosed and claimed process of the patent. While petitioners' question of how a novel product can be made

by application of an old process to an old composition of matter may be an interesting question of fact in another case, it is not an issue here. The petitioners' statement of the process is not in accordance with the facts of this case.

Petitioners' assertion that "There are plainly vital omissions from respondent's patent, essential to commercial success * * *" is wrong. The District Court stated:

> "The conclusion, therefore, is reached * * * that the teachings of the patent are sufficient to enable one skilled in the art of boule growing under the Verneuil procedure * * * to produce asterism in these gems * * *, and that a profitable percentage of the product will be of gem quality." (Ct. Dec. 4-5).

This conclusion of the District Court is recorded in Finding of Fact No. 13. The Court of Appeals agreed with the District Court, saying:

> "The finding that the description of the process in the patent is sufficient to enable a person skilled in the art to grow star rubies and sapphires successfully is supported by adequate evidence and should be sustained." (Ct. Dec. 20-21).

The Courts below reached these conclusions after studying the testimony of petitioners' and respondent's experts in the field, and of some ten workers in the production of synthetic stones presented by both sides. Blackboard sketches, physical models, motion pictures, photographs, charts and data sheets were also presented at the trial for the instruction of the Court.

The substance of the record on the issue of adequacy of the disclosure is simply as follows: The steps of the patent are correctly stated and are essential. Petition-

ers' witnesses testified they could not make the synthetic star stones of worthwhile quality without adding the steps of annealing and orientation control. They explained their failure in terms of a thin skin of precipitated titania. Respondent's witnesses testified they could and did make salable star stones with no more than the patent teachings. They testified that petitioners' explanation of failure was inaccurate, primarily because the precipitated titania was not as thin or localized as petitioners assumed.

The District Court believed respondent's witnesses, and resolved the conflicting testimony in respondent's favor. The Court of Appeals found that over 1,800 pages of written record of the trial and the over 200 exhibits amply supported the District Court's conclusion.

Annealing and 90° orientation of the boules are improvements on the basic process. They were known in the art in August of 1947 when the patent application was filed. Petitioners assert in their Statement that the importance of annealing and 90° orientation were known to the patentees at the time of filing the application for patent (Pet. p. 9-10). The records quoted incompletely by petitioners show that the patentees considered the use of annealing and 90° orientation control, and did make star stones using them. What petitioners' incomplete quotations do not show is that at the time the application was filed the patentees did not know of what importance annealing and 90° orientation would be. They knew the process would work without them. They knew these procedures were expensive. Whether or not they were commercially worthwhile was then undetermined.

Petitioners now say the patentees, Burdick and Glenn, did know the more profitable commercial production available with annealing and 90° orientation; and that they

concealed this for the benefit of respondent. The Courts below found that the evidence did not support this position.

> "14. The inventors disclosed all of what they believed to be the essentials of their process. There was no fraudulent withholding of information." (Finding of Fact No. 14, Ct. Dec. 10).

Indeed, Burdick was directly confronted with petitioners' charge, and under oath testified:

> "Q. Mr. Burdick, you have been accused of fraud and withholding information and various other things of that kind in connection with your patent in suit. So far as you know, is there any information essential to the practice of your invention which is not in the patent?
>
> "A. No. At the time I signed the patent application I felt that it disclosed all the essential points. I still feel that way." (R. 1502-1503).

III.

THERE IS NO CONFLICT BETWEEN THE DECISIONS IN THIS CASE AND THE DECISIONS OF THIS COURT OR THE APPELLATE COURTS.

THE COURTS BELOW APPLIED THE CORRECT LAW.

The questions presented (No. 1-3) in the Petition are stated by petitioners to arise under R. S. 4888 (U. S. C. Tit. 35, § 33) and particularly that portion requiring the applicant for patent to file a written description of his invention "in such full, clear, concise and exact terms" as to enable any person skilled in the art to practice it (Pet., p. 10).

Petitioners' answer pleaded as defenses the language of R. S. 4888 quoted above, and also the language of R. S.

4920. The latter permits a defendant to plead that "for the purpose of deceiving the public, the description and specification filed by the patentees in the Patent Office was made to contain less than the whole truth relative to their alleged invention or discovery," which petitioners did (Petitioners' Answer, pars. 18(c), (d)).

Both courts below rejected these defenses. The District Court specifically did so by finding facts contrary to those needed to support these defenses. The Court of Appeals considered both separately, upholding the findings of the trial judge.

Petitioners point to the District Court decision in *Stelos Co.* v. *Hosiery Motor-Mend Corporation et al.*, 60 F. 2d 1009 (D. C., S. D., N. Y.), as being in conflict with the decision of this Court and the decision below of the Court of Appeals. Analysis of the *Stelos* case does not support petitioners' argument.

The *Stelos* case related to a patent claiming a method of repairing runs in knitted fabrics, such as silk stockings. The patentee had disclosed only a "porcelain dish" as a holder for supporting and stretching the fabric during repair. The District Court found that an "egg cup" was the preferred form of holder, and that "the egg cup • • • is one of the most important elements in the plaintiff's method." The District Court held that the plaintiff must fail if "he did know the preferred method of practicing his patent and failed to disclose it in his specification or in his method claim." (p. 1012).

This Court affirmed the District Court, 295 U. S. 237, after holding the "egg cup" to be an essential of the invention, saying at page 241:

> "He is upon the horns of a dilemma; he either discovered this form of holder and its virtues prior to the

application for this patent or he found it later. If the first supposition be correct, his application violated R. S. 4888; if the second, his patent does not cover the egg-cup holder."

This is exactly the law applied by the Court of Appeals in the present case; indeed, substantially the same words are used. Here the Court of Appeals said:

"Whether R. S. § 4888 or R. S. § 4920 is relied on is probably not of practical importance, for where the evidence is clear that the patentee omitted elements which he knew were important, fraud will be implied by the fact finder." (Ct. of Appeals, Ct. Dec. 21).

In view of this statement it is clear that the Court of Appeals would have found the patent invalid (just as this Court did in the *Stelos* case) if patentees, Burdick and Glenn, had known when they filed the application for patent that annealing and 90° orientation were the preferred procedures. The fact is that the patentees did not know them to be the preferred procedures (Finding of Fact No. 14, 15, Ct. Dec. 10, R. 115, 1504). The patentees were specifically found to have "disclosed all of what they believed to be the essentials of their process. There was no fraudulent withholding of information." (Finding of Fact No. 14, Ct. Dec. 10). "• • • the patentees disclosed the whole truth relative to [their] invention" (Ct. of Appeals, Ct. Dec. 22).

The *Stelos* case does not present a dilemma here, because the "egg cup" holder in that case was found to be "one of the most important elements of the invention". It was considered by this Court as "the only suitable holder". This is not true of annealing and 90° orientation. They were found not to be "essentials". (Findings

of Fact Nos. 13, 15, Ct. Dec. 9, 10; Dist. Ct., Ct. Dec. 4-5; Ct. of Appeals, Ct. Dec. 20). They are solely improvements when applied to the specific form of production developed by respondent. That they are nothing more is shown by their replacement to a large extent by even later improvements, *e. g.*, pressure variation (Pet., p. 8). The fact is established that the requirements and the teachings of the patent remain inviolate although particular production techniques may change.

The Court of Appeals decisions referred to by petitioners (Pet., p. 12) and as stated in the petition are in line with the *Stelos* case. One of them, *Rohm, et al.* v. *Martin Dennis Co.*, 263 Fed. 388 (C. C. A. 3rd, 1920) is from the same court which decided the present case. They offer no basis for conflict of decisions. Furthermore, the omitted elements in the patents there in issue were in each case essential to the operation of the disclosure to produce the claimed result. The facts of this case are different. Annealing and 90° orientation were found not essential.

Petitioners seek to show a conflict of the District Court opinion in the *Stelos* case (60 F. (2d) 1009) with a very early decision of this Court in *Sewall* v. *Jones*, 91 U. S. 171 (1875). In one sense, petitioners deny their own assertion noting that the *Sewall* case was decided on a different issue, namely, infringement. In any event, as applied to this case, the later pronouncement of this Court in *Stelos Co.* v. *Hosiery Motor-Mend Corp.*, 295 U. S. 237 (1935), and the adherence thereto by the courts below, are dispositive of the questions raised by petitioners.

IV.

THERE IS NO IMPORTANT QUESTION OF FEDERAL LAW INVOLVED.

This is a case in which the principal controversy is over factual issues. Respondent has shown in Point I that the questions presented require that this Court must assume facts contrary to those found by the Courts below, before the proferred issues of law can arise. In Point III it was shown that the Courts below did apply the law in accordance with the last pronouncement of this Court on the issue of adequacy of disclosure, and as petitioners here contend the law should be. Further argument in this case could only be on the question of whether or not the concurrent Findings of Fact of the Courts below are clearly erroneous. No more fitting a situation could arise than that presented here for the oft-applied rule of this Court in *Graver Mfg. Co.* v. *Linde Co.*, 336 U. S. 271, 275:

> "A court of law, such as this Court is, rather than a court for correction of errors in fact finding, cannot undertake to review concurrent findings of fact by two courts below in the absence of a very obvious and exceptional showing of error."

The patent itself is applicable to the limited field of ornamental jewelry, and more particularly to a single jewel, synthetic star ruby and sapphire. It involves the discovery and making of a gemstone not before known. It is a new gem in the jewelry trade. Its "sensational" character lies in the nature of its discovery; not in its importance to the industry of the nation. When gauged by the subject matter of *Marconi Wireless Company* v. *United States*, 320 U. S. 1, this case does not present an

invention of such broad economic import as to warrant consideration by this Court.

Question No. 3 presented by petitioners is but a rewording of Question No. 2, in terms of enforceability. It is subject to the same vice, based on the same assumptions contrary to the facts of record. A play on words cannot convert Question No. 3 into an important question as applied to this. The word "tying" as used in the authorities cited (Pet., p. 16) is used relative to tying materials and merchandise to the coattails of a patent. The proofs present no issue on "tying" of trade secrets. The Findings of Fact specifically rebut the assertion that when the application for patent was filed it was tied to any undisclosed procedures. The Courts below found that the teachings of the patent are sufficient for successful production of star stones by others when the patent expires. Fraud and withholding of information such as might raise a question of enforceability are specifically denied by the Findings of Fact (Finding of Fact No. 14, Ct. Dec. 10).

There is no new question of law raised by petitioners' Question No. 4. It is premised on the assertion that the synthetic star rubies and sapphires cannot be made by the disclosed process of the patent. This it has been shown is contrary to the concurrent findings of the Courts below. Thus Question No. 4, although couched in language of infringement, merely harks back to the basic contention of the preceding questions.

Petitioners' four questions are but devious paths inevitably converging at a common junction. Basically they have attacked only the sufficiency of the disclosure of the invention made by the patentees. The issue raised is one of fact. *Bank* v. *Rauland Corporation*, 146 F. (2d) 19, 22-23 (C. C. A. 7th, 1944). This Court has indicated that it is a court of law, and not one for correcting errors and findings of fact, particularly when concurrent and involv-

ing technical questions. *Graver Mfg. Co.* v. *Linde Co.*, 336 U. S. 271. Whatever immature questions are presented, they have not, we submit, achieved sufficient dignity in the context of this record to merit the consideration of this Court.

CONCLUSION.

For the foregoing reasons it is respectfully submitted that this Petition for a Writ of Certiorari should be denied.

Respectfully submitted,

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May 20, 1952

APPENDIX.

ADDITIONAL ERRONEOUS STATEMENTS OF FACT IN THE PETITION.

The following are a few of the erroneous statements of fact contained in the petition but not specifically pointed out in the Statement of the Case:

PETITION, at page 3:

"This second cause of action was tried, but has not been passed upon".

BUT THE RECORD SHOWS:

Respondent reserved the right to present a rebuttal case on the second cause of action (R. 1277).

PETITION, at page 4:

"Petitioners are found to have infringed through employing a heating process which both Courts below explicitly held to be old".

BUT THE RECORD SHOWS:

Infringement was based on no such finding. As stated by the Court of Appeals: "Defendants infringed the patented process when they used the critical amount of titania * * *" (Ct. Dec. 24). The "heating process" referred to is the annealing step "which is in effect an improvement on the patent and no more" (Dist. Ct., Ct. Dec. 5). Infringement is spelled out in Findings of Fact Nos. 18-22; and does not depend upon Finding of Fact No. 28 (Ct. Dec. 10, 11, 12).

PETITION, at page 6:

"The difference between .3 of 1% and .5 of 1% is of no consequence."

BUT THE RECORD SHOWS:

That the patented range (0.1 to 0.3% of titania is "essential", "critical" (Finding of Fact No. 11, Ct. Dec. 9; Ct. of Appeals, Ct. Dec. 16).

PETITION, at page 6:

"In making star boules, it is essential to prevent them from splitting in half, although there is not a word in the patent to this effect."

BUT THE RECORD SHOWS:

Star stones can be made successfully from split boules (R. 1445, Pltf. Exh. 64). The patent refers to whole boules (Col. 3, line 9) and half boules (Col. 3, line 1). Annealing is not necessary— "• • • was not determined to be a preferable procedure" at time of filing (Finding of Fact No. 15, Ct. Dec. 10).

PETITION, at page 6:

"The patent prescribes that the stone must be so cut that its base is parallel to the C-axis."

BUT THE PATENT IN FACT STATES:

". . . a gemstone is cut en cabochon in such a way that the base of the gemstone is normal [that is, *perpendicular*] to the C-axis . . .". (Patent in suit, col. 3, line 25.)

PETITION, at page 7:

"Unless 90° orientation is obtained in a boule . . . the star is found to be incomplete and eccentrically located."

BUT THE RECORD SHOWS:

90° orientation is not necessary in order to produce salable star stones, nor necessarily preferred:

"Q. Could you tell us if you get the biggest complete star stones using orientation of 90° or of 60°?

"A. I would say that you could probably get the biggest stones by using 60°." (Burdick, R. 784.)

PETITION, at page 7:

"Respondent knew all about the importance of seeding because it had filed a patent application therefor long before filing for the patent in suit."

BUT THE RECORD SHOWS:

Respondent's prior application related to seeding for producing *rods*, and had nothing whatsoever to do with star stones (Dft. Exh. 100).

PETITION, at page 7:

"Despite their obvious importance, then well-known to respondent, the patent makes no mention of either the annealing or 90° orientation techniques."

BUT THE RECORD SHOWS:

Both annealing and orientation are old in the art (R. 954, 118). However at the time of applying for patent annealing was not determined to be a preferable procedure *in the manufacture of star stones* (Finding of Fact No. 15, Ct. Dec. 10); and orientation control at the time of filing was "of very questionable importance, very questionable" (R. 115).

PETITION, at page 8:

"When the sufficiency of its disclosure was questioned at the trial, respondent refused several formal offers of laboratory facilities . . . to demonstrate that its patent would work in producing star stones of gem quality."

BUT THE RECORD SHOWS:

There was no such refusal by respondent. The Court simply did not believe that further tests were necessary (R. 1047). When the matter was brought up again the Court stated:

"Maybe we will do that when we get all through here, unless I get cleared up on some points" (R. 1472).

PETITION, at page 8:

"Shortly prior to the trial, it [respondent] conducted some tests, using a very special type of burner . . .".

BUT THE RECORD SHOWS:

A special type of burner was not used.

". . . there is no difference in oxidation reduction conditions using the Linde burner . . ." (R. 1841). The burner used by respondent is old in the art (R. 1841).

"Mr. Voit: Your Honor, Mrs. Hugle testified that we had used a very special burner. We have shown here, out of Mr. Barnes' mouth and by means of his sketch, that they are the same.

• • •

"The Court: He said they used a regular burner. It may be a little different because there are twelve or more different designs, but the basic principle is all the same.

"Is that right?

"The Witness: That is right, yes.

"Mr. Voit: If that point has been made clear, your Honor, we are satisfied.

"The Court: It has." (R. 1860-1.)

PETITION, at page 8:

"The star stones obtained in this carefully rigged test were very poor specimens, cracked and obviously unsalable."

BUT THE RECORD SHOWS:

Complete records were kept on the growing of the test stones (R. 1448-1450). These records were supplied to petitioner. The assertion of "rigging" is groundless. The stones were made up strictly in accordance with the patent and without seeding or annealing (R. 1443, 1830, 1841).

"These stones are salable, they are desirable, . . . six-legged stars . . ." (R. 1445).

The expert testified that the stones are of "gem quality" and salable (R. 1814).

The expert further testified that they are comparable to the Linde early commercial production (R. 1815).

The stones which petitioners now depreciate were closely inspected by the District Court and referred to as "these beautiful stones" (R. 1454).